



### J2 Questioned Document Examination of Two-Source Traced Forgery in Signatures: A Case Study

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After attending this presentation, attendees will have learned how to examine two-source tracing in signatures. Traced forgery is performed using tracing paper, carbon paper, transmitted light, indented tracing, or a scanned image, but two-source signature tracing in questioned documents has great importance in solving questioned documents signature cases.

This presentation will impact the forensic science community by introducing a unique case study in which two-source signature tracing in questioned documents was analyzed with the comparison of known routine signatures of the deceased.

Pakistan has been affected by the worst form of terrorism and militancy. The scourge of terrorism has taken its toll on every aspect of life. One of the better ways to help overcome these difficulties is through education, and, in particular, high-level research and development in the field of forensic sciences. Signatures have great importance today, as every person signs his or her name or mark once, twice, or numerous times a day. Signature forgery can occur in many ways, including freehand simulation, tracing, and image transfer. Alternatively, a signature may be written with some disguise with a view to disavowing it at a later time.

Due to the regular use of signatures, the problem often arises of determining whether these signatures are genuine, disguised, or traced. Signature forgery means changing any signature with the intent to deceive, which could be accomplished in a number of ways. One of the methods most often used is discussed in this case study, that of two-source traced forgery, which means reproducing an exact copy of the genuine signature by using two sources of an original signature. In this type of forgery, most signatures that are traced have two parts. One part of the signature is traced from a document with an original signature and the second part is traced from another document with a second original signature to reveal the natural variation in signatures. Traced forgery is performed by using tracing paper, carbon paper, transmitted light, indented tracing, or scanned images. The forensic questioned document examiner examines every detail of the traced signature and concludes whether or not the questioned signature exhibits the characteristics and mathematical measurements with respect to the specimen and admitted routine signatures. In this presentation, a case will be discussed in which questioned signatures were examined and conclusions provided when the questioned author was deceased; the forensic document examiner relied only on admitted routine signatures. The comparison/examination of questioned signatures was performed, followed by the comparison/examination of the admitted routine signatures in order to locate the origin of the questioned signatures. The result in this particular case revealed that the disputed signature exactly superimposed with a slight adjustment with the admitted routine signature.

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#### **Signatures, Tracing, Forgery**